

## ABSTRACT:

In the method, semiconductor substrates are etched to provide nanowires, said substrates comprising a first layer of a first material and a second layer of a second material with a mutual interface, which first and second materials are different. They may be different in the doping type. Alternatively, the main constituent of the material may be different, for example SiGe or SiC versus Si, or InP versus InAs. In the resulting nanowires, the interface is atomically sharp. The electronic devices having nanowires between a first and second electrode accordingly have very good electroluminescent and optoelectronic properties.

Fig. 1